ABSTRACT

During a scan operation in a circular, singly linked list having a number of list entries each of which has an associated next pointer field and a root pointer register

5   that includes a root pointer that points to, or otherwise references, an arbitrary list entry. In order to add a new list entry to the list, the root pointer included in the root pointer register is copied into a next pointer field of the added list entry. Next, the root pointer register is overwritten with a pointer that points to or otherwise references the added list entry. In this way, additions to a circular, singly linked list

10   that are done at the time of scanning involve only a single SRAM write access.